What is claimed is:

1. A heat treatment apparatus, which comprises:

a heat treatment table thereon a substrate to be treated is disposed;

two or more of heaters heating each regions obtained by dividing the heat treatment table into two or more;

at least one sensor detecting temperature of the predetermined portion of the heat treatment table;

a means for surmising the temperature of each portions of the heat treatment table based on the detected temperature; and

a means for controlling output of the each heaters based on the detected temperature so that the temperature of the entire heat treatment table is uniform.

2. The heat treatment apparatus as set forth in claim 1:

wherein the means for surmising the temperature is an arithmetic unit which is connected to the sensor and, based on the detected temperature, surmises mathematically the temperatures of the each portions of the heat treatment table;

wherein the controlling means is a control unit which is connected to the arithmetic unit and, based on the surmised temperatures of the each portions, controls the output of the each heaters so that the temperature of the entire heat treatment table is uniform.

3. A heat treatment apparatus, which comprises:

a heat treatment table thereon a substrate to be

treated is disposed;

two or more of heaters heating each regions obtained by dividing the heat treatment table into two or more regions;

at least one sensor detecting temperature of the predetermined portion of the heat treatment table;

a means for surmising amount of heat supplied to each portions of the substrate to be treated based on the detected temperature; and

a means for controlling output of the each heaters based on the surmised amount of heat so that the amount of heat supplied to the substrate to be treated is uniform.

4. The heat treatment apparatus as set forth in claim 3:

wherein the means for surmising the temperature is an arithmetic unit which is connected to the sensor and, based on the detected temperature, surmises mathematically the amount of heat supplied to the each portions of the substrate to be treated;

wherein the controlling means is a control unit which is connected to the arithmetic unit and, based on the surmised temperatures of the each portions, controls the output of the each heaters so that the amount of heat supplied to the substrate to be treated is uniform.

5. The heat treatment apparatus as set forth in claim 1, further comprises:

a cover assembly which is disposed opposite to the heat treatment table above the heat treatment table and evacuates a gas heated by the heat treatment table;

wherein, on the surface opposite to the heat treatment table of the cover assembly, a plurality of upper heaters are disposed divided concentric.

6. The heat treatment apparatus as set forth in claim 3, which further comprises:

a cover assembly which is disposed opposite to the heat treatment table above the heat treatment table and evacuates a gas heated by the heat treatment table;

wherein, on the surface opposite to the heat treatment table of the cover assembly, a plurality of upper heaters are disposed divided concentric.

~~7~~ 7. The heat treatment apparatus as set forth in claim 1:

wherein the each heaters disposed to the heat treatment table are disposed concentric, and sensors are disposed in one line in a diameter direction of the heat treatment table.

8. The heat treatment apparatus as set forth in claim 1:

wherein the each heaters disposed on the heat treatment table are disposed concentric, and sensors are disposed in a thickness direction.

~~8~~ 9. The heat treatment apparatus as set forth in claim 1:

wherein the each heaters disposed on the heat treatment table are disposed concentric, and sensors are disposed in one line in a diameter direction and in a thickness direction.

~~9~~ 10. The heat treatment apparatus as set forth in claim ~~3~~ 3:

wherein the each heaters disposed to the heat treatment table are disposed concentric, and sensors are disposed in one line in a diameter direction.

11. The heat treatment apparatus as set forth in claim 3:

wherein the each heaters disposed on the heat treatment table are disposed concentric, and sensors are disposed in a thickness direction.

12. The heat treatment apparatus as set forth in claim 3:

wherein the each heaters disposed on the heat treatment table are disposed concentric, and sensors are disposed in one line in a diameter direction and in a thickness direction.

13. A heat treatment apparatus, which comprises:

a heating means for heating a lower surface of a substrate to be treated; and

a means for cooling, above the substrate to be treated, a gas heated to a predetermined temperature or more by the heating means.

14. A heat treatment apparatus, which comprises:

a heating means for heating a lower surface of a substrate to be treated;

a means for evacuating a gas heated by the heating means from an upper portion of the substrate to be treated;

a means for detecting a temperature affecting the substrate to be treated; and

a means for cooling, based on the detected temperature, a gas passing through the above portion of the substrate to

a first heating means for heating a lower surface of a substrate to be treated to a predetermined temperature; and

a second heating means for heating an upper surface of the substrate to be treated at a temperature higher than the first heating means.

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~~27~~. The heat treatment apparatus as set forth in claim 11
~~26~~, which further comprises:

a means for controlling the second heating means to a temperature where the substrate to be treated is exposed to heat treatment at an aimed temperature.

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~~28~~. The heat treatment apparatus as set forth in claim 12
~~27~~, which further comprises:

a means for detecting the temperature of the substrate to be treated;

wherein the controlling means is a means for controlling the second heating means, based on the detected temperature of the substrate to be treated, so that a temperature of heat treatment of the substrate to be treated is an aimed temperature.

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~~29~~. The heat treatment apparatus as set forth in claim 12
~~27~~:

wherein the first heating means is a heating plate thereon a substrate to be treated is disposed, and which comprises further a cover assembly which is disposed opposite to the heating plate above the heating plate and evacuates a gas heated by the heating plate;

the second heating means is at least one heater disposed on a surface of the cover assembly opposed to the

heating plate; and

the controlling means comprises a first control unit for maintaining the heating plate at a predetermined temperature, and a second control unit for adjusting the heater to a temperature which is higher than the heating plate and under which the substrate to be treated is treated at an aimed temperature.

30. The heat treatment apparatus as set forth in claim 27:

wherein the first heating means is a heating plate thereon a substrate to be treated is disposed, and which comprises further a cover assembly which is disposed opposite to the heating plate above the heating plate and evacuates a gas heated by the heating plate, and a sensor for detecting the temperature of the substrate to be treated;

the second heating means is at least one heater disposed on a surface of the cover assembly opposed to the heating plate; and

the controlling means comprises a first control unit for maintaining the heating plate at a predetermined temperature, and a second control unit for adjusting the heater, based on the detected temperature of the substrate to be treated, to a temperature which is higher than the heating plate and under which the substrate to be treated is treated at an aimed temperature.

31. The heat treatment apparatus as set forth in claim 29:

wherein the heater is divided into a plurality of

heaters capable of turning on and off an electric power source independently.

32. The heat treatment apparatus as set forth in claim 29:

wherein the heater is disposed concentric.

33. The heat treatment apparatus as set forth in claim 32:

wherein the heater is divided into two or more parts along a diameter direction.

34. The heat treatment apparatus as set forth in claim 29:

wherein the heater is a gradation heater of which heating capacity is continuously inclined from the center of the cover assembly to the periphery portion.

~~35.~~ 20. The heat treatment apparatus as set forth in claim ~~29~~ 14:

wherein the heating plate is a thermal surface plate which maintains a predetermined temperature by heating medium vapor circulating inside thereof.

~~36.~~ 21. The heat treatment apparatus as set forth in claim ~~29~~ 14:

wherein, on a lower surface side of the cover assembly, a flat surface opposite to the heating plate is formed.

be treated.

15. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected to an exhaust outlet at a center of the cover assembly; and

the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet of the cover assembly and a control unit for controlling the heating plate and the cooler so that heat affects uniformly on the substrate to be treated.

16. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected to an exhaust outlet at a center of the cover assembly; and

the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet of the cover assembly, a sensor for detecting temperature of a gas in the neighborhood of the exhaust outlet, and a control unit for controlling the heating plate and the cooler based on the detected temperature.

17. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected to an exhaust outlet at a center of the cover assembly;

and the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet of the cover assembly, a sensor detecting a temperature of the substrate to be treated, and a control unit for controlling the heating plate and the cooler based on the detected temperature.

18. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected to an exhaust outlet at a center of the cover assembly; and

the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet at the center of the cover assembly, a sensor detecting a temperature of the heating plate, and a control unit for controlling the heating plate and the cooler based on the detected temperature.

19. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected

to an exhaust outlet at a center of the cover assembly; and

the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet of the cover assembly, a first sensor detecting a temperature of a gas in the neighborhood of the exhaust outlet, a second sensor detecting a temperature of the heating plate, and a control unit for controlling the heating plate and the cooler based on the detected temperatures of the gas and heating plate.

20. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected to an exhaust outlet at a center of the cover assembly; and

the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet of the cover assembly, a first sensor detecting a temperature of a gas in the neighborhood of the exhaust outlet, a second sensor detecting a temperature of the substrate to be treated, and a control unit for controlling the heating plate and the cooler based on the detected temperatures of the gas and substrate to be treated.

21. The heat treatment apparatus as set forth in claim 14:

wherein the heating means is a heating plate and which comprises further a cover assembly disposed above the heating plate and collecting a gas heated by the heating plate;

the evacuating means is an exhausting system connected to an exhaust outlet at a center of the cover assembly; and

the cooling means comprises a cooler disposed in the neighborhood of the exhaust outlet of the cover assembly, a first sensor for detecting a temperature of a gas in the neighborhood of the exhaust outlet, a second sensor for detecting a temperature of the substrate to be treated, a third sensor for detecting a temperature of the heating plate, and a control unit for controlling the heating plate and the cooler based on the detected temperatures of the gas, substrate to be treated and heating plate.

22. The heat treatment apparatus as set forth in claim 15:

wherein the cooler is disposed in spiral.

23. The heat treatment apparatus as set forth in claim 15:

wherein the cooler is composed of a plurality of doughnut shaped coolers disposed concentric.

24. The heat treatment apparatus as set forth in claim 15:

wherein the cooler is a sector-shaped cooler formed in a plurality of concentric circles.

25. The heat treatment apparatus as set forth in claim 15:

wherein the heating plate is a thermal surface plate of which temperature is maintained to a predetermined temperature by a heating medium vapor circulating therein.

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26. A heat treatment apparatus, which comprises: